

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Claim 1 (Currently amended): An apparatus comprising:

(A) a focus adjusting system;

(B) (A) a driving device which drives said a focus adjusting system from one of a state in which a near distance object is in focus and a state in which a far distance object is in focus to the other; and

(C) (B) a control device having a first driving mode for minutely driving said focus adjusting system before a climbing-drive mode and a second driving mode for driving said focus adjusting system at a high speed, which, in said first driving mode, repeatedly performs determination of a focusing state of said focus adjusting system while causing said driving device to drive said focus adjusting system, and, if said focus adjusting system has been driven in one direction until the number of times of the determination repeatedly performed reaches a predetermined number of times, inverts restrains said focus adjusting system from being driven in said one direction.

Claim 2 (Original): An apparatus according to claim 1, wherein said focus adjusting system includes a lens.

Claim 3 (Original): An apparatus according to claim 1, wherein said driving device includes a motor.

Claim 4 (Original): An apparatus according to claim 1, wherein, if said focus adjusting system has been driven in one direction until the number of times of the

determination repeatedly performed reaches the predetermined number of times, said control device inhibits said focus adjusting system from being driven in said one direction.

Claim 5 (Original): An apparatus according to claim 1, wherein, if said focus adjusting system has been driven in one direction until the number of times of the determination repeatedly performed reaches the predetermined number of times, said control device controls said driving device to drive said focus adjusting system in a direction reverse to said one direction.

Claim 6 (Original): An apparatus according to claim 1, further comprising:
an image pickup device which receives a light flux taken in through said focus adjusting system,

wherein said control device repeatedly performs determination of a focusing state of said focus adjusting system on the basis of a picked-up image signal from said image pickup device.

Claim 7 (Original): An apparatus according to claim 1, further comprising:
an image pickup device which receives a light flux taken in through said focus adjusting system,

wherein said control device repeatedly performs determination of a focusing state of said focus adjusting system on the basis of a predetermined high-frequency component of a picked-up image signal from said image pickup device.

Claim 8 (Original): An apparatus according to claim 1, further comprising:
an image pickup device which receives a light flux taken in through said focus adjusting system,

wherein said control device controls said driving device to drive said focus adjusting system in such a direction as to increase a predetermined high-frequency component of a picked-up image signal from said image pickup device.

Claim 9 (Original): An apparatus according to claim 1, wherein said control device controls said driving device to drive said focus adjusting system in such a direction as to bring said focus adjusting system into an in-focus state.

Claim 10 (Original): An apparatus according to claim 9, wherein, if said focus adjusting system has been driven within a predetermined range for a predetermined period of time, said control device determines that said focus adjusting system is in an in-focus state.

Claim 11 (Original): An apparatus according to claim 9, wherein, if said focus adjusting system has been driven within a predetermined range for a predetermined period of time, said control device stops driving of said focus adjusting system by said driving device.

Claim 12 (Original): An apparatus according to claim 9, wherein, if said focus adjusting system has been driven beyond a predetermined range in a predetermined period of time, said control device controls said driving device to drive said focus adjusting system at a faster speed in a direction in which said focus adjusting system has been driven.

Claim 13 (Original): An apparatus according to claim 9, wherein said control device has a first driving mode for minutely driving said focus adjusting system and a second driving mode for driving said focus adjusting system at high speed, and, in said first mode, if said focus adjusting system has been driven in one direction until the number of times of the determination repeatedly performed reaches the predetermined number of times, restrains said focus adjusting system from being driven in said one direction.

Claim 14 (Original): An apparatus according to claim 13, wherein, in said first driving mode, if said focus adjusting system has been driven beyond a predetermined range in a predetermined period of time, said control device controls said driving device to drive said focus adjusting system in said second driving mode in a direction in which said focus adjusting system has been driven.

Claim 15 (Canceled).

Claim 16 (Previously presented): An apparatus according to claim 1, wherein, in said first driving mode, if said focus adjusting system has been driven beyond a predetermined range in a predetermined period of time, said control device controls said driving device to drive said focus adjusting system in said second driving mode in a direction in which said focus adjusting system has been driven.

Claim 17 (Original): An apparatus according to claim 1, wherein said apparatus includes an image pickup apparatus.

Claim 18 (Original): An apparatus according to claim 1, wherein said apparatus includes a camera.

Claim 19 (Original): An apparatus according to claim 1, wherein said apparatus includes an optical apparatus.

Claim 20 (Currently Amended): An apparatus adapted for a ~~focus-adjusting system~~ and a driving device which drives ~~said a~~ focus adjusting system from one of a state in which a near-distance object is in focus and a state in which a far-distance object is in focus to the other, said apparatus comprising:

a control device which restrains said focus adjusting system from being driven in a same direction if the control device determines that said focus adjusting system has been

consecutively driven in the same direction, before determining whether a focusing direction of said focus adjusting system is the same or not more than a predetermined number of ~~time~~ times while causing said driving device to drive said ~~focusing~~ focus adjusting system.

Claim 21 (Original): An apparatus according to claim 20, wherein said apparatus includes an image pickup apparatus.

Claim 22 (Original): An apparatus according to claim 20, wherein said apparatus includes a camera.

Claim 23 (Original): An apparatus according to claim 20, wherein said apparatus includes an optical apparatus.

Claim 24 (Currently Amended): A focus adjusting method comprising the steps of: restraining ~~said~~ a focus adjusting system from being driven in a same direction if ~~a~~ control device determines that said focus adjusting system has been consecutively driven in the same direction, before determining whether a focusing direction of said focus adjusting system is the same or not more than a predetermined number of ~~time~~ times while driving said focus adjusting system from one of a state in which a near-distance object is in focus and a state in which a far-distance object is in focus to the other.

Claim 25 (Currently Amended): A computer program product for focus adjustment, comprising the contents of: restraining ~~said~~ a focus adjusting system from being driven in a same direction if a control device determines that said focus adjusting system has been consecutively driven in the same direction, before determining whether a focusing direction of said focus adjusting system is the same or not more than a predetermined number of ~~time~~ times while driving said focus adjusting system from one of a state in which a near-distance object is in focus and a state in which a far-distance object is in focus to the other.

Claim 26 (New): An apparatus according to claim 20, wherein the restraint to be performed by the control device is to invert said focus adjusting system from being driven in said one direction.

Claim 27 (New): An apparatus adapted for a driving device which drives a focus adjusting system so as to increase the level of signal indicating a focus evaluating, said apparatus comprising:

a determining unit which determines whether said focus adjusting system has been consecutively driven in the same direction; and

a control device which restrains said focus adjusting system from being driven if said determining unit determines that said focus adjusting system has been consecutively driven in the same direction even if the level of signal indicating the focusing evaluating is increasing.

Claim 28 (New): A computer-readable program for driving a focus adjusting system so as to increase the level of signal indicating a focus evaluating, comprising the contents of:

determining whether said focus adjusting system has been consecutively driven in the same direction, and

restraining said focus adjusting system from being driven if it is determined that said focus adjusting system has been consecutively driven in the same direction even if the level of signal indicating the focusing evaluating is increasing.